

CLAIMS

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1. A method for deleting entries from a
directory in which directory information is stored in a
15 set of database tables, comprising the steps of:

responsive to a request to delete a directory
entry, tagging the directory entry in a first table;
periodically searching for tagged entries in the
first table during a cleanup process interval; and
deleting references to the tagged entries
throughout the set of database tables.

2. The method as described in Claim 1 wherein
24 the directory entry is tagged by setting its creation
time to a given value.

3. The method as described in Claim 2 wherein
the given value is a null value.

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4. The method as described in Claim 1, further
including the steps of:

performing a search for directory entries that
satisfy a search query; and

34 excluding tagged entries from search results that
otherwise satisfy the search query.

5. The method as described in Claim 4 wherein the step of excluding tagged entries includes modifying an SQL query to exclude rows having a null change creation.

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6. The method as described in Claim 1 wherein the directory is a Lightweight Directory Access Protocol (LDAP) directory service and the database tables are managed by a relational database management service.

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7. The method as described in Claim 1 wherein the first table is an entry table.

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8. The method as described in Claim 7 wherein the set of database tables includes at least one attribute table storing information about an attribute.

2 9. A method for deleting entries from a
directory in which directory information is stored in a
set of database tables, comprising the steps of:

responsive to a request to delete a directory
entry, tagging the directory entry in a first table;

7 responsive to a search for directory entries that
satisfy a search query, excluding tagged entries from
search results that otherwise satisfy the search query;

periodically searching for tagged entries during a
12 cleanup process interval; and

deleting references to the tagged entries
throughout the set of database tables.

10. The method as described in Claim 9 wherein
35 the directory entry is tagged by setting its creation
time to a given value.

11. The method as described in Claim 10 wherein
the given value is a null value.

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12. The method as described in Claim 9 wherein
the first table is an entry table.

13. The method as described in Claim 12 wherein the set of database tables includes at least one attribute table storing information about an attribute.

5 14. A method for searching a database from a directory service, comprising the steps of:

responsive to a search for directory entries that satisfy a search query, excluding given entries from search results that otherwise satisfy the search query,
10 wherein the given entries identify database entries that have been tagged for deletion; and
returning the search results.

15 15. The method as described in Claim 14 wherein the directory service is a Lightweight Directory Access Protocol (LDAP) directory service and the database is managed by a relational database management service.

16. A computer program product in a
20 computer-readable medium for deleting entries from a directory in which directory information is stored in a set of database tables, comprising:

means responsive to a request to delete a directory entry for tagging the directory entry in a
25 first table;

means for periodically searching for tagged entries in the first table during a cleanup process interval; and

means for deleting references to the tagged entries throughout the set of database tables.

17. The computer program product as described in
33 Claim 16, further including:

means responsive to a search for directory entries that satisfy a search query for excluding tagged entries from search results that otherwise satisfy the search query.

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18. The computer program product as described in Claim 17 wherein the search query is a Lightweight Directory Access Protocol (LDAP) directory service query.

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19. A directory service, comprising:

a directory organized as a naming hierarchy having a plurality of entries each represented by a unique identifier;

48 a relational database management system having a backing store for storing directory data in a set of database tables; and

means for deleting entries from the directory,
comprising:

3 means responsive to a request to delete a
directory entry for tagging the directory entry in
a first table;

means for periodically searching for tagged
entries in the first table during a cleanup
8 process interval;

means for deleting references to the tagged
entries throughout the set of database tables; and

means responsive to a search for directory
entries that satisfy a search query for excluding
35 tagged entries from search results that otherwise
satisfy the search query.

20. The directory service as described in Claim
19 wherein the directory is compliant with the
40 Lightweight Directory Access Protocol (LDAP).